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Fourteenth day of July 2004

J. Billingsley

JULIE BILLINGSLEY
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Patent Act 1990

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Provisional Specification:

Invention Title: **WALL MATT.**

Technical field: Building and Construction.

The invention is described in the following statement:

The invention is a multi-layered wrapping which provides a durable and flexible web that can be stretched over a base surface of a building or structure, to support an outer surface protective coating or render.

The essential items regarding this invention is an inner protective layer, a backing layer, a self-adhesive layer between the protective layer and the backing layer, a layer of reflective foil, an outer fabric mesh layer, and a bonding agent between all of these layers. The inner protective layer is peeled away to allow the backing layer to adhere to the base surface

Further optional layers may be added which include an additional layer of metallic reflective foil, and a water resistant building paper. All or some of these optional layers may be bonded to the essential items.

Drawings: (Attached to this application)

Fig I: configuration of layers shows sectional diagram of elements of the wall matt.

Fig II: diagram showing the outer fabric-mesh layer

note: The details indicated in these drawings should be considered in all respects as illustrative and not restrictive.

General Description:

(Refers to the attached drawing fig I,)

The multi-layered wrapping consists of successive layers of webs which are bonded together using adhesives, fusion, or other bonding processes.

Essential items: The essential items regarding this invention include an outer fabric mesh layer (8), an outer reflective foil layer (6), a backing paper (4), a self-adhesive layer (3), an inner protective peel-away layer (2) and the bonding layers (5 and 7) between the adjacent layers.

Optional items: Furthermore, the invention embraces optional items, some or all of which may be added and bonded to the essential items, by fusion or adhesian.

Option I: Here the optional layers include a water resistant building paper layer. This building paper layer is bonded to the backing paper (4) and the outer reflective foil (6).

Option II: Here the optional layers include an inner layer of reflective foil that is bonded to the backing paper (4). This inner reflective foil layer may be bonded to the peel off layer (2) by the self-adhesive layer (3).

Option III: Here the optional layers include an inner layer of reflective foil and a water resistant building paper layer. The building paper is bonded to the outer reflective foil layer (6) and the backing paper (4), with the inner reflective foil bonded to the backing paper (4) and the protective peel-away paper (2).The self adhesive layer (3) is adhered to the inner surface of the inner layer of reflective foil.

General Description of outer fabric mesh layer (8):

Typically, the fabric mesh layer (8) is made up of a net-like structure, arranged in a flat three dimensional matrix configuration, and has sufficient durability and composition to provide grip for the outer protective coatings (9), and provides overall strength and flexibility to the whole wall matt, in order that it may stretch over the base surface (1).

Typically the fabric mesh layer (8) is constructed of a three dimensional matrix of woven or bonded material, which may be a fiberglass, plastic or other durable material.

It is desirable, but not essential that this fabric mesh layer (8) is constructed of a non-corrosive material, typically plastic or fibreglass threads. Recycled plastic may be used to provide these plastic threads.

A diagram of the fabric-mesh is shown on Fig II.
The matrix of strands (A) are separated by air spaces (B).

Application of the Invention:
(Refers to the attached drawing fig I:)

The invention is preferably manufactured as a multi-layered wrapping form, with all layers bonded together at the manufacturing site. The **wall matt** can be manufactured in convenient size and weight for handling and shipping, including roll form.

In the application of the **wall matt** the inner protective paper layer (2) is peeled away from the innermost layer to allow the **wall matt** to adhere to the outer surface of the base wall (1). Then a series of coatings (9) are applied to the outer fabric mesh layer (8) to assist the wall in weathering, and to provide an even outer surface.

In a similar application, the **wall matt** may be attached to an internal base wall to cover the wall including the gaps and cracks in that wall, and to provide a flexible support web for subsequent render or paint.

The **wall matt** may be delivered to the building site in a roll form. The **wall matt** is unrolled with its inner surface placed against the base wall, peeling off the sacrificial protective paper layer before sticking the wall matt to the base surface. Once the first **wall matt** roll is completely rolled out and stuck down to the base wall, a second roll is stuck to the base wall with adjoining edges butting, and the adjacent fabric mesh strands interwoven This process is continued until all of the base wall is covered in **wall matt.** Then one of the selected surface coatings is applied to the outer surface of the wall matt, and built up to achieve a flat and acceptable surface. The process of rendering the outer surface, can be stopped at any time, and continued at a later time, to suit the site conditions.

These surface coatings may be typically

(i) a cement render combined with a weather sealant, or
(ii) an acrylic paint, or
(iii) a plastic surface-render.

Advantages of the Invention:

1. The wall matt can be stretched over a base surface that has uneven surface and gaps. Therefore there is less stringent quality required in the preparation of these base surfaces if this wall matt process is used. The construction of the base surface can be executed by less skilled persons than tradespersons, therefore reducing manpower costs. Other base surface treatments need more stringent preparation requiring skilled tradespersons, and associated costs.

2. The application of the wall matt to a base surface requires only semi-skilled manpower and requires a minimum of equipment. The process can be tailored to suit the applicator's timetable without affecting the quality.

3. The application of a render or protective paint to the wall matt requires only semi-skilled people The applicator may work intermittently, returning to the wall matt to suit their timetable and weather conditions, without effecting the quality.

Other similar rendering preparations require skilled tradespersons to apply a reinforcing mesh at the same time as a render application, and to continue without breaks in the surface. This limits the on site efficiency and costs.

4. This wall matt process may be used for new construction and refurbishment of existing buildings and other structures.

5. There is reduced site preparation, saving site time and costs.

6. There is little waste of the wall matt, since all off cuts can be used to cover patching areas and future works.

7. The wall matt material is portable, and easily handled by unskilled persons.

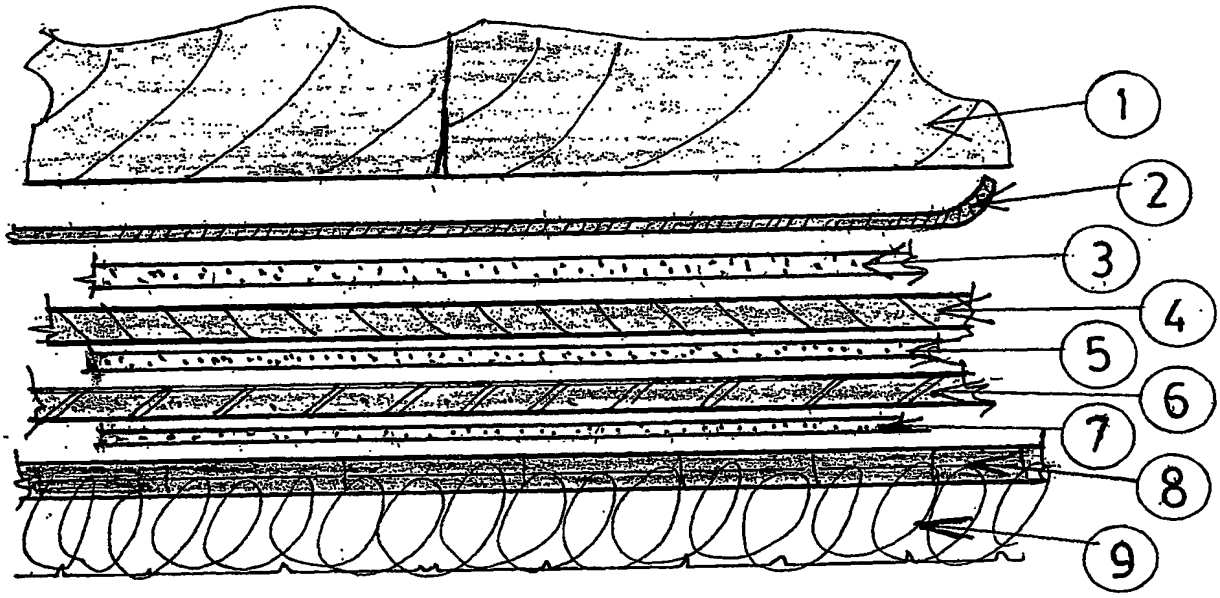
Dated this 12th day of March 2004.

Owen Derek BARR
Applicant and Inventor.

FIG I: **Wall Matt**

Sectional diagram of elements of the wall matt.

Notes:
(i)The details indicated in this drawing should be considered in all respects as illustrative and not restrictive.
(ii) The numbers (1 to 9) shown below, indicate each element referred to on page 3 of the attached provisional specification.

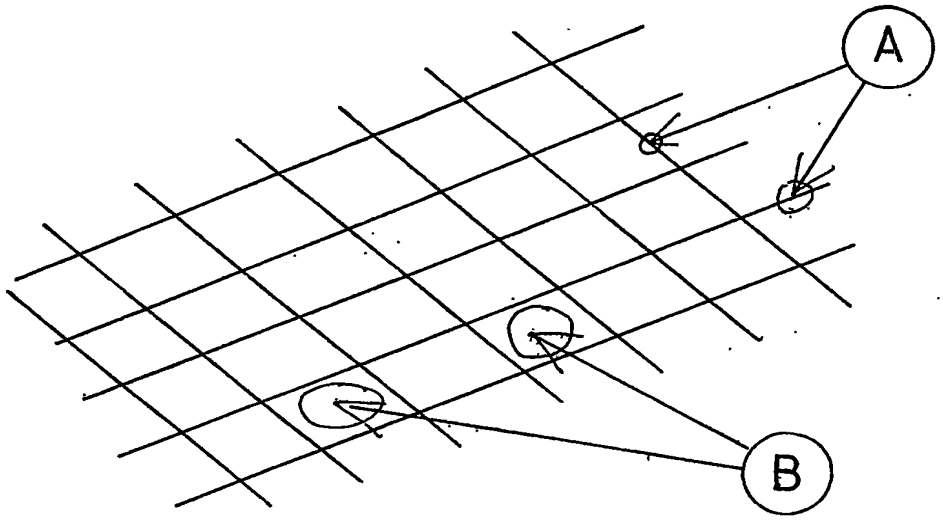


1. base structure being covered by wall matt
2. inner protective peel-away layer
3. self adhesive layer
4. backing paper or layer
5. adhesive/bonding layer
6. outer reflective foil layer
7. adhesive/bonding layer
8. outer fabric-mesh layer
9. outer surface render/paint layer

FIG II: **Wall Matt**

Diagram of fabric-mesh.

Notes:
(i)The details indicated in this drawing should be considered in all respects as illustrative and not restrictive.
(ii) The letters (A and B) shown below, indicate each element referred to on page 4 of the attached provisional specification.



A. strands of fiberglass or similar material bonded together at their intersection
B. air space between strands

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